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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/520,535

09/28/2005

Patrick David Lopath

TRANS 3.3-052

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EXAMINER

CATTUNGAL, SANJAY

ART UNIT

PAPER NUMBER

3768

MAIL DATE

DELIVERY MODE

04/09/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/520,535	Applicant(s) LOPATH, PATRICK DAVID	
	Examiner SANJAY CATTUNGAL	Art Unit 3768	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01/06/05 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see remarks filed 01/12/2009, with respect to the rejection(s) of claim(s) 1-12 under Nash have been fully considered and are persuasive. Nash reference failed to teach the use of micro-bubbles, instead used microspheres as such, the previous Final rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of U. S. Patent No. 6,626,855 to Weng et al. in view of WIPO document WO 01/10313 by Nash et al. provided in the IDS. Nash reference has been relied upon again to teach that the ablation therapy has been used on cardiac artery/vein/tissues.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over U. S. Patent No. 6,626,855 to Weng et al. in view of WIPO document WO 01/10313 by Nash et al. provided in the IDS.**

4. Regarding **Claims 1 and 7**, Weng teaches a method of ablating myocardial tissue within the wall of the heart or within the wall of a blood vessel connected to the

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heart comprising: supplying micro bubbles to the circulatory system of a mammalian subject by introducing the micro bubbles into the artery so that the micro bubbles perfuse the tissue of the subject (Col. 13 line 63 through Col. 14 line 4); and while the micro bubbles are present in the myocardial tissue, applying ultrasonic energy to the wall of the blood vessel so that tissue having micro bubbles present therein is heated by the ultrasonic energy and ablated by the heat (Col. 13 line 63 through Col. 14 line 4).

5. Weng does not expressly teach that the method is used on cardiac artery/vein/tissue.

6. Nash teaches ablation therapy on cardiac artery/vein/tissue (Claim 1-6, 21, and 27).

7. It would have been obvious to one of ordinary skill in the art at the time of invention to modify Weng with a setup where in the target tissue is a cardiac artery/tissue as taught by Nash, since the method described by Weng is an ablation method using micro-bubbles wherein the micro bubbles is injected to a target tissue. One of ordinary skill in the art would recognize that the method could be performed on any tissue and would yield the same results as such, it would be obvious to perform the therapy on a cardiac artery/vein/tissue.

8. Regarding **Claims 2, 4-6, and 9-11**, Nash teaches that the therapy is performed on a cardiac artery/vein/tissue (Claim 1-6, 21, and 27).

9. Regarding **Claims 3 and 12**, Weng teaches that the contrast agent is injected and the ultrasound energy is applied through the same catheter assembly (Fig. 3a and Col. 13 line 63 through Col. 14 line 4).

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SANJAY CATTUNGAL whose telephone number is (571)272-1306. The examiner can normally be reached on 9:30 - 5:00 pm.
11. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on (571)272-0823. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SPC

/Long V Le/
Supervisory Patent Examiner, Art Unit 3768